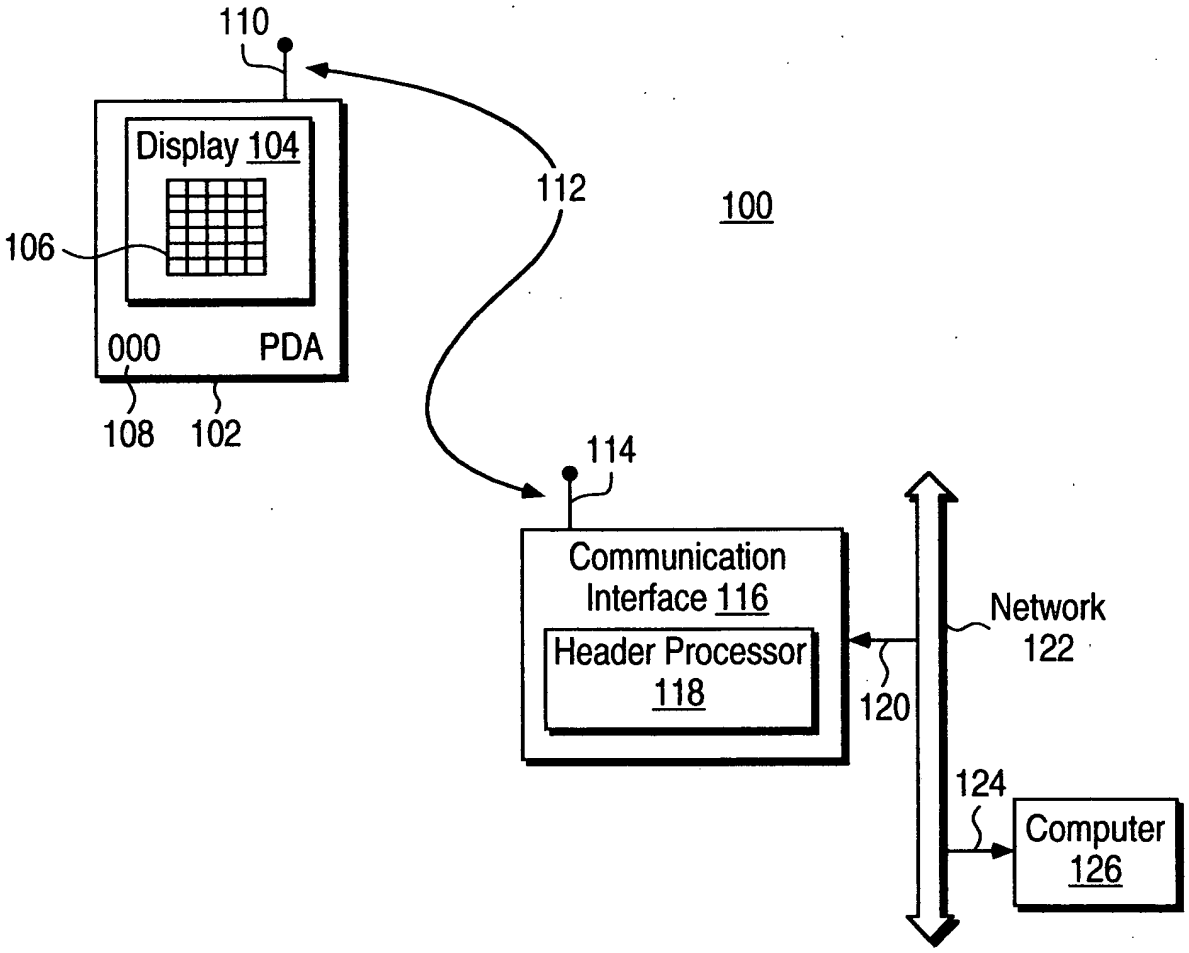

110
Display 104
106
000
PDA
108
102
112
100
114
Communication
Interface 116
Header Processor
118
120
Network
122
124
Computer
126

FIG. 1

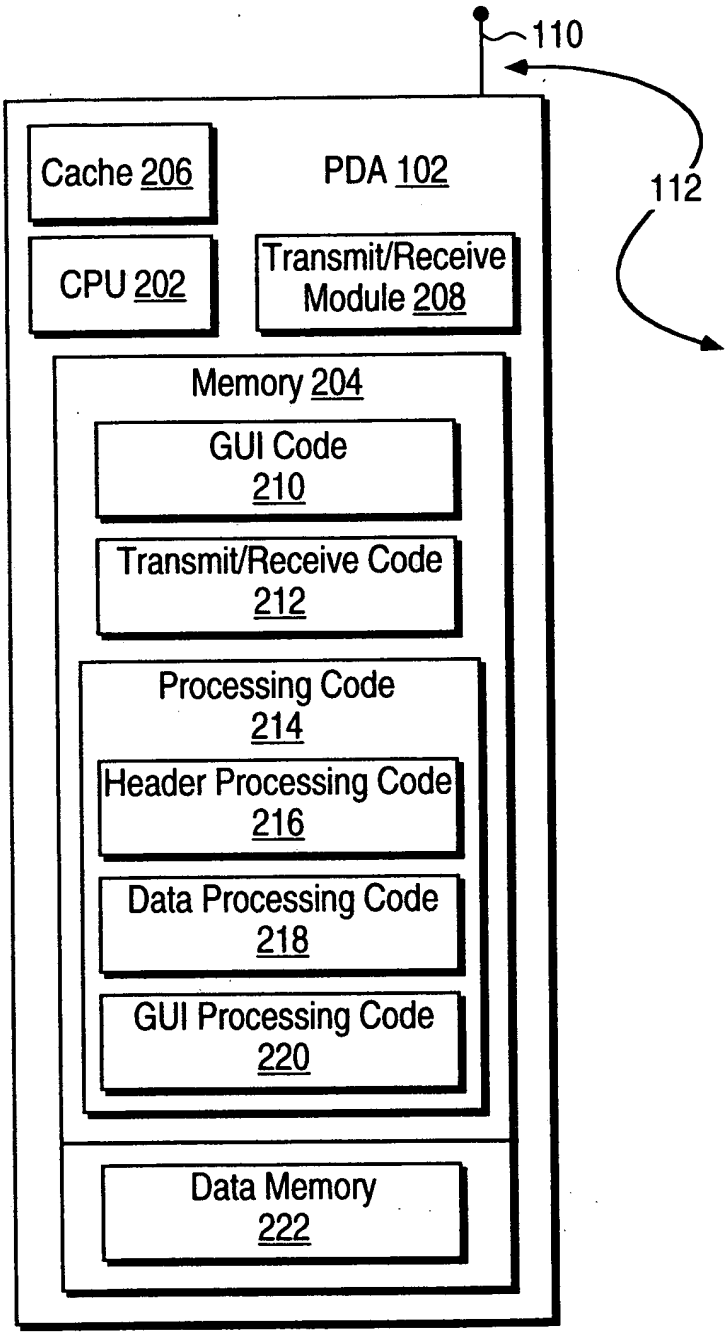

110
112
Cache 206
PDA 102
CPU 202
Transmit/Receive Module 208
Memory 204
GUI Code 210
Transmit/Receive Code 212
Processing Code 214
Header Processing Code 216
Data Processing Code 218
GUI Processing Code 220
Data Memory 222

FIG. 2

FIG. 3

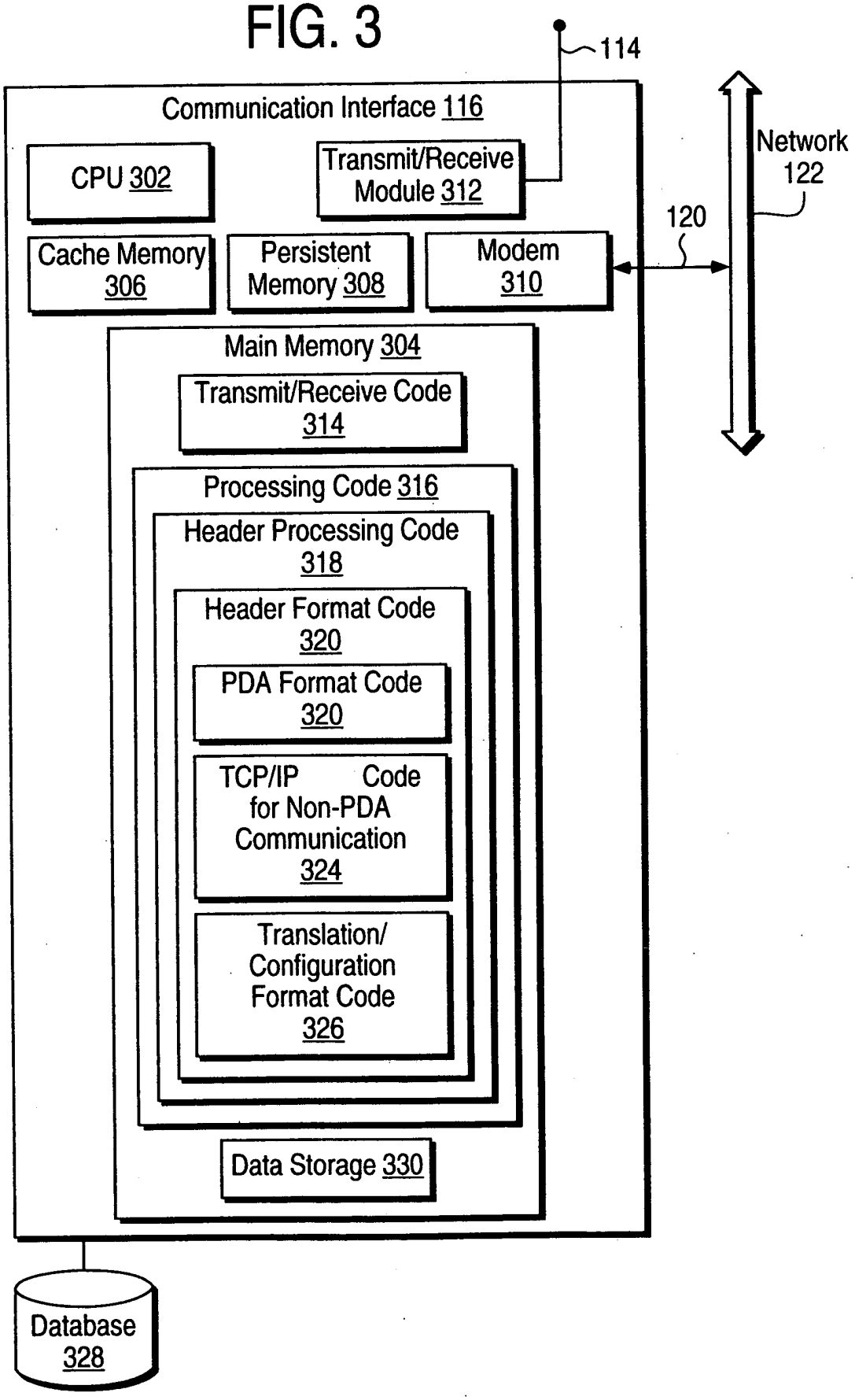
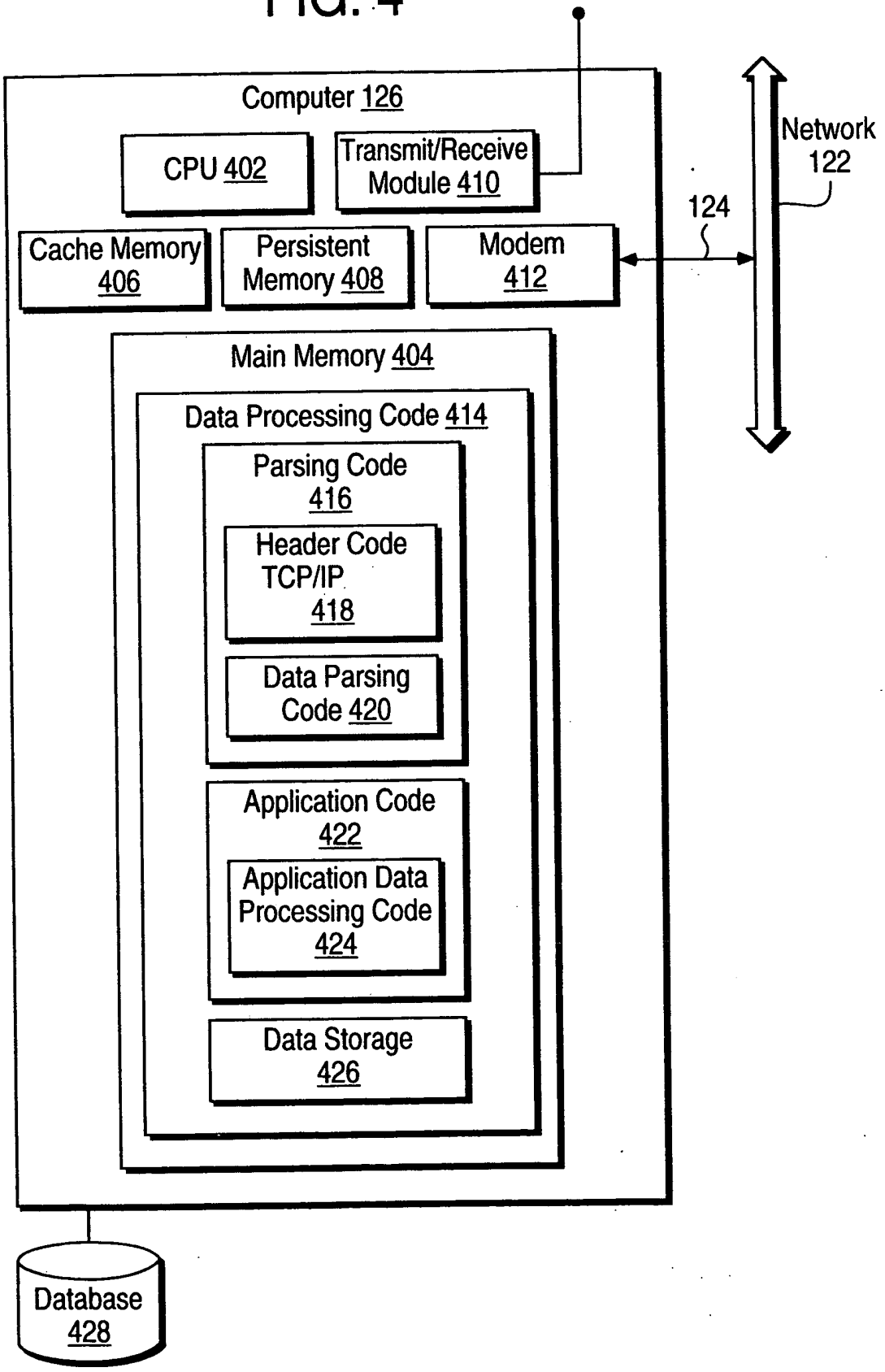

114
Communication Interface 116
CPU 302
Transmit/Receive Module 312
Network 122
120
Cache Memory 306
Persistent Memory 308
Modem 310
Main Memory 304
Transmit/Receive Code 314
Processing Code 316
Header Processing Code 318
Header Format Code 320
PDA Format Code 320
TCP/IP Code for Non-PDA Communication 324
Translation/ Configuration Format Code 326
Data Storage 330
Database 328

FIG. 4


Computer 126
CPU 402
Transmit/Receive Module 410
Cache Memory 406
Persistent Memory 408
Modem 412
124
Network 122
Main Memory 404
Data Processing Code 414
Parsing Code 416
Header Code TCP/IP 418
Data Parsing Code 420
Application Code 422
Application Data Processing Code 424
Data Storage 426
Database 428

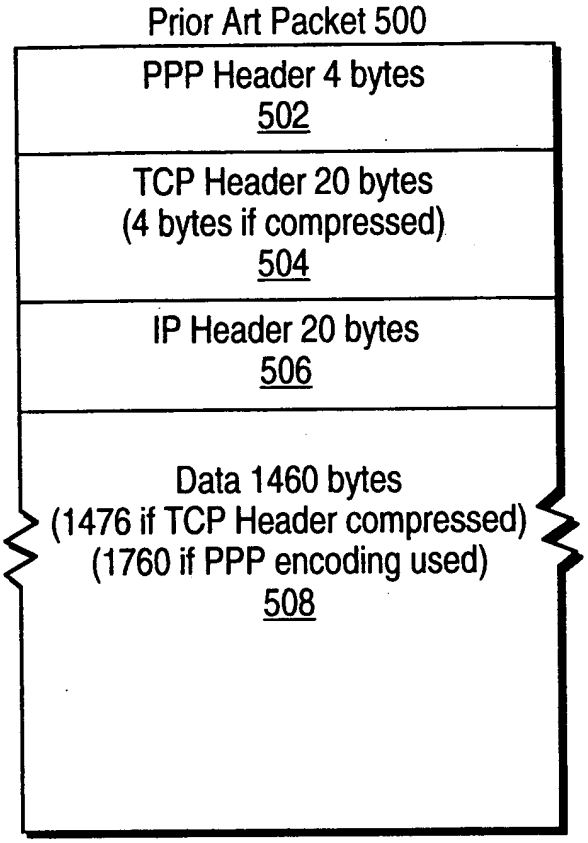

Prior Art Packet 500
PPP Header 4 bytes
502
TCP Header 20 bytes
(4 bytes if compressed)
504
IP Header 20 bytes
506
Data 1460 bytes
(1476 if TCP Header compressed)
(1760 if PPP encoding used)
508

FIG. 5

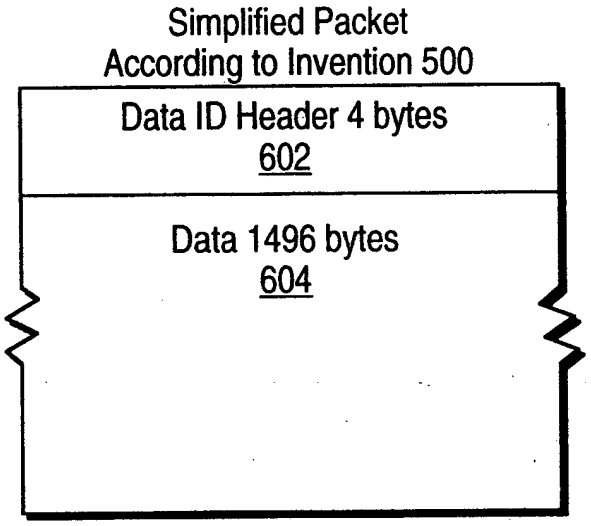

Simplified Packet
According to Invention 500
Data ID Header 4 bytes
602
Data 1496 bytes
604

FIG. 6

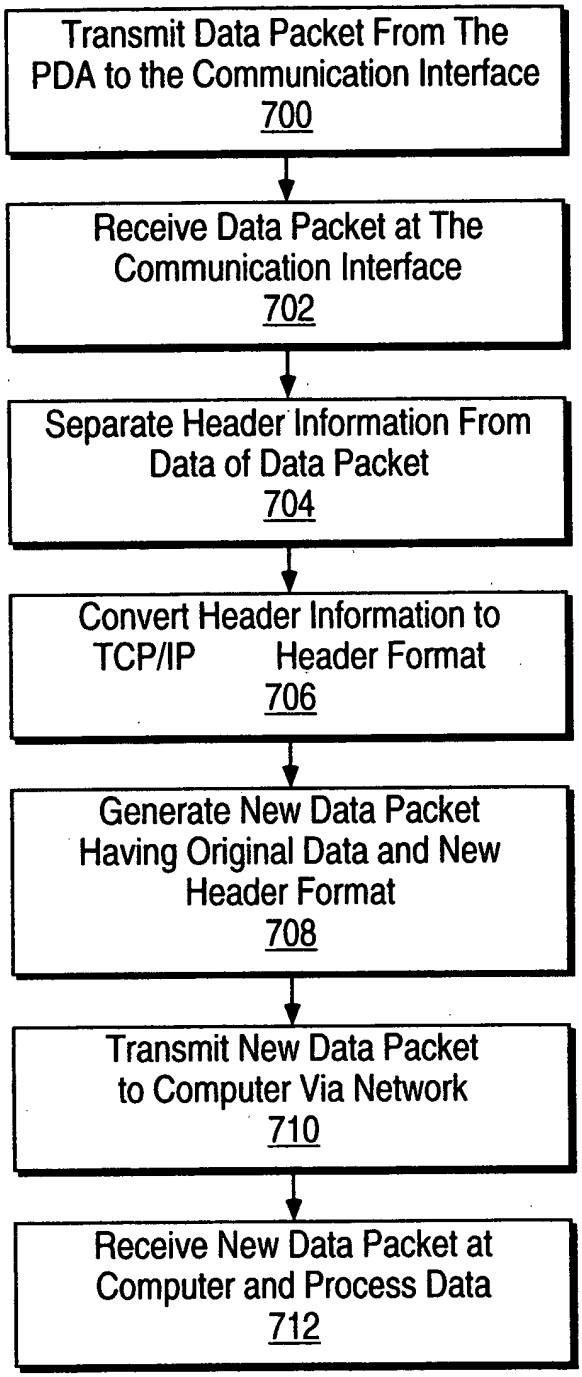

Transmit Data Packet From The PDA to the Communication Interface
700
Receive Data Packet at The Communication Interface
702
Separate Header Information From Data of Data Packet
704
Convert Header Information to TCP/IP Header Format
706
Generate New Data Packet Having Original Data and New Header Format
708
Transmit New Data Packet to Computer Via Network
710
Receive New Data Packet at Computer and Process Data
712

FIG. 7

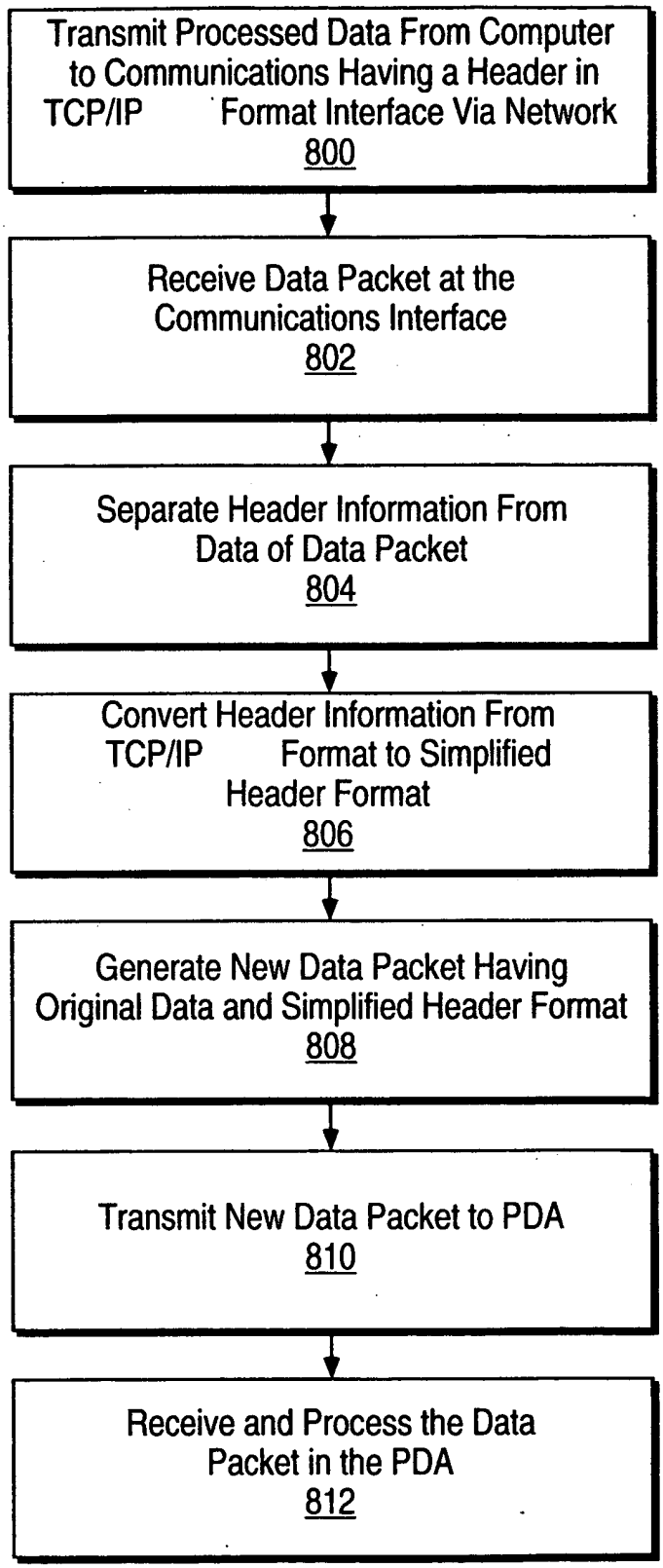

Transmit Processed Data From Computer to Communications Having a Header in TCP/IP Format Interface Via Network
800
Receive Data Packet at the Communications Interface
802
Separate Header Information From Data of Data Packet
804
Convert Header Information From TCP/IP Format to Simplified Header Format
806
Generate New Data Packet Having Original Data and Simplified Header Format
808
Transmit New Data Packet to PDA
810
Receive and Process the Data Packet in the PDA
812

FIG. 8